



# ECONOMY

**Economic Issue #1:** Existing transportation mobility and quality are identified by the business community as a major challenge to economic growth.

- ▶ As the labor force grows and new industry opportunities arise, there is a need for physical infrastructure to keep pace and align with industry requirements. For example, direct air service and connectivity to both coasts is extremely limited for a city of Austin's size and inhibits the city's ability to recruit high-end office users (e.g. corporate headquarters) with frequent travel needs.
- ▶ Roadway congestion impacts commute-time for workers and also places a burden on economic activity (e.g., 93% of freight coming in and out of central Texas travels on roadways). While providing new transit options (CapitalMetro All Systems Go Plan) will help relieve roadway congestion, the pace of implementation is a concern (see *Transportation section*).
- ▶ Transportation infrastructure was the most frequently ranked challenge and necessary improvement by respondents at the Austin Economic Forecast event.<sup>5</sup>
- ▶ Currently, there is no rail infrastructure in Austin to load/unload freight. This could become an important issue if the light industrial employment sectors continue to expand (e.g. logistics & distribution, etc.).
- ▶ Anticipated growth in the office and industrial sectors of the city economy may lead to more infill and redevelopment in Austin. These industries have a common desire for "clustering" near similar firms, but also require transportation access and mobility.



## ECONOMIC INDICATORS AND TRENDS

- ▶ **Between 2001 and 2008, the Austin MSA gained over 76,104 jobs in the professional services, trade, hospitality, and education sectors.**
- ▶ **Austin has established the following target growth sectors in technology and creative industries: nanotechnology, life sciences, corporate headquarters, software/tech support, digital media, communication, clean technology, and advanced manufacturing.**
- ▶ **The percentage of workers with college degrees has increased dramatically in the last two decades (49% of Austin's workers, compared with 32% in Texas, and 36% in the nation).**

<sup>5</sup> Survey respondents included a mix of regional private sector industry representatives, realty groups, banks, and other economic interests (e.g., Austin Community College, University of Texas, Austin Tech Incubator, Sematech, etc.).

## Economic Issue #2: The City is well-suited to recruit and grow businesses in Austin's target employment sectors.

- ▶ Over the last 30 years, Austin major employment sectors transitioned from university, government, and military to a high-tech computer hardware and software employment center. The manufacturing and electronic sectors continue to decline and the greatest growth is occurring in professional services, trade, and leisure/hospitality.
- ▶ While the current recession has resulted in a high vacancy rate (20%) in the office market, Austin's technical and creative industries provide opportunity to grow the City's tax base and generate new jobs. Growth in these industries will require an educated workforce and a mix of available office, flexible light industrial, and research and development space.
- ▶ There is potential for significant growth in the medical and life sciences sectors. The proposed development of a medical school in Austin and the City's expanding senior population could lead to greater expansion in the health services sectors.
- ▶ Austin is emerging as a national center for clean energy technology and employment. Local and national incentives provide the potential for significant numbers of well-paid jobs in the industry (e.g., solar insulation and manufacturing, energy services, and sustainable building).<sup>6</sup> In Austin, key projects like Pecan Street and UT's Clean Energy Incubator are providing strategic thinking and resources for capitalizing clean energy technology. Regional stakeholders (e.g., city officials, local utility companies, business groups, economic and workforce developers, higher education institutions) are beginning to formally collaborate to strengthen the region's competitiveness.



<sup>6</sup> Renewable energy generation (i.e. wind, solar, biofuels), in particular, is anticipated to be a \$325 billion industry nationally by 2018 and Central Texas is well positioned to play a major role.

<sup>7</sup> The U.S. Department of Energy (DOE) recently awarded a \$10.4 million grant to the Mueller/Pecan Street project to act as a national demonstration site for development of an advanced smart grid system. This project will monitor electricity and water use and generate clean energy further supporting Austin's growth in renewable energy industries.

## Economic Issue #3: The City is experiencing a rapidly expanding and more educated labor force, which in turn is strengthening Austin's economy. Educational attainment levels are especially important to high-growth companies.

- ▶ Growth in new target industries will expand the need for job training in areas such as business management, entrepreneurship, and health services to meet expected industry demand (e.g., at Austin Community College, University of Texas, and regional institutions). Interviews suggest there is a need for improved coordination between employers and regional education/job training development (i.e., to match post-secondary institutions with skills most needed by high-growth industry sectors).
- ▶ Despite a growing percentage of the population with college degrees, high drop-out rates among the minority community in the Austin Independent School District (AISD) have significant economic development implications. Businesses cannot necessarily hire locally and the drop-out rate impacts the overall competitiveness/attractiveness of the region to employers and families.

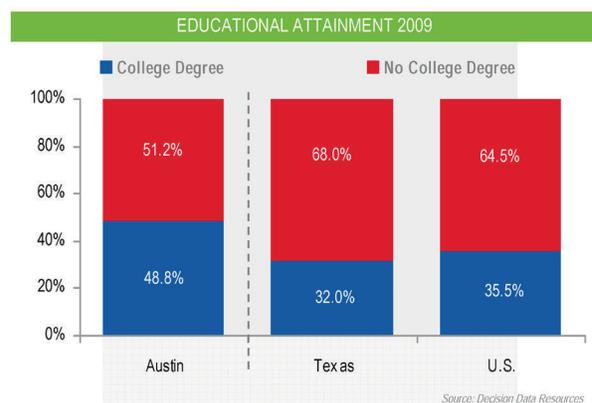


Figure 10. Educational Attainment, 2009, Source: Decision Data Resources



### Economic Issue #4: Small businesses and start-up companies face challenges that may inhibit their growth (e.g., rising business costs, regulatory barriers, lack of affordable rental space).

- ▶ Despite recent improvements, land development codes and permitting processes are seen as complex, making it difficult for small business owners and start-up businesses to navigate. In addition, the codes and processes do not necessarily support mixed-use development patterns.
- ▶ Creative industries (arts, film, music, etc.) are an important niche industry sector that contributes jobs, strengthens the tax base, and enhances the city's quality of life. However, a number of factors inhibit the growth of this sector. The limitations for these small businesses include physical space, health care options, affordable housing, and affordable rents for venue owners.
- ▶ For Austin high-tech start-ups, two primary concerns are insufficient lab/incubation space and availability of later-stage financing. Given the importance of high-tech entrepreneurship to Austin's future economy, there is an opportunity for the City to position itself to address these issues in preparation for the economy's rebound.

### Economic Issue #5: As the City continues to grow, increased investment and coordination to ensure adequate infrastructure provision (e.g., electric power) will be critical.

- ▶ Given Austin's strong technology sector, affordable and reliable electricity for industrial and commercial consumers is essential. Utility reliability is also a concern for high-volume electricity users (e.g. data centers, hospitals, large manufacturers, etc.).
- ▶ Austin Energy's newly diversified power portfolio (which includes increased contribution from renewable resources) may create higher electricity rates and increased costs for resident and industry customers making the city less competitive in terms of cost, at least in the short-term.
- ▶ Professional service firms are another key future industry sectors. While not necessarily large power consumers, these businesses demand high-quality buildings with adequate buffer from non-compatible uses, clear access to major highways, and often on-site amenities such as hike and bike trails and nearby entertainment amenities.

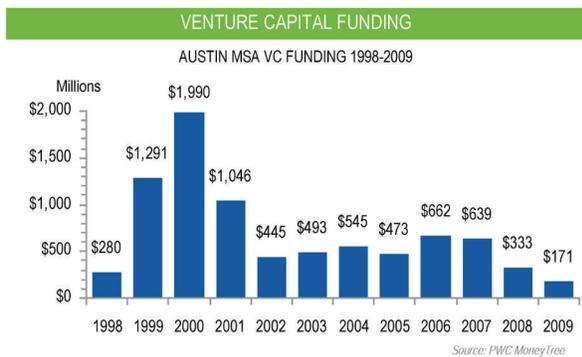


Figure 11. Austin MSA Venture Capital Funding, 1998-2009



**Economic Issue #6:** There is a need for regular business/industry trend analysis of economic, labor market, and demographic data issues impacting Austin businesses.

- ▶ Interviewees identified a need to measure and quantify employment and per capita income in target industries and continue to calculate fiscal impact in the overall context of economic effects and any environmental impacts. In addition, while there are positive relationships between economic development entities in Austin, there is a need for better coordination between the organizations.



# ENVIRONMENTAL RESOURCES

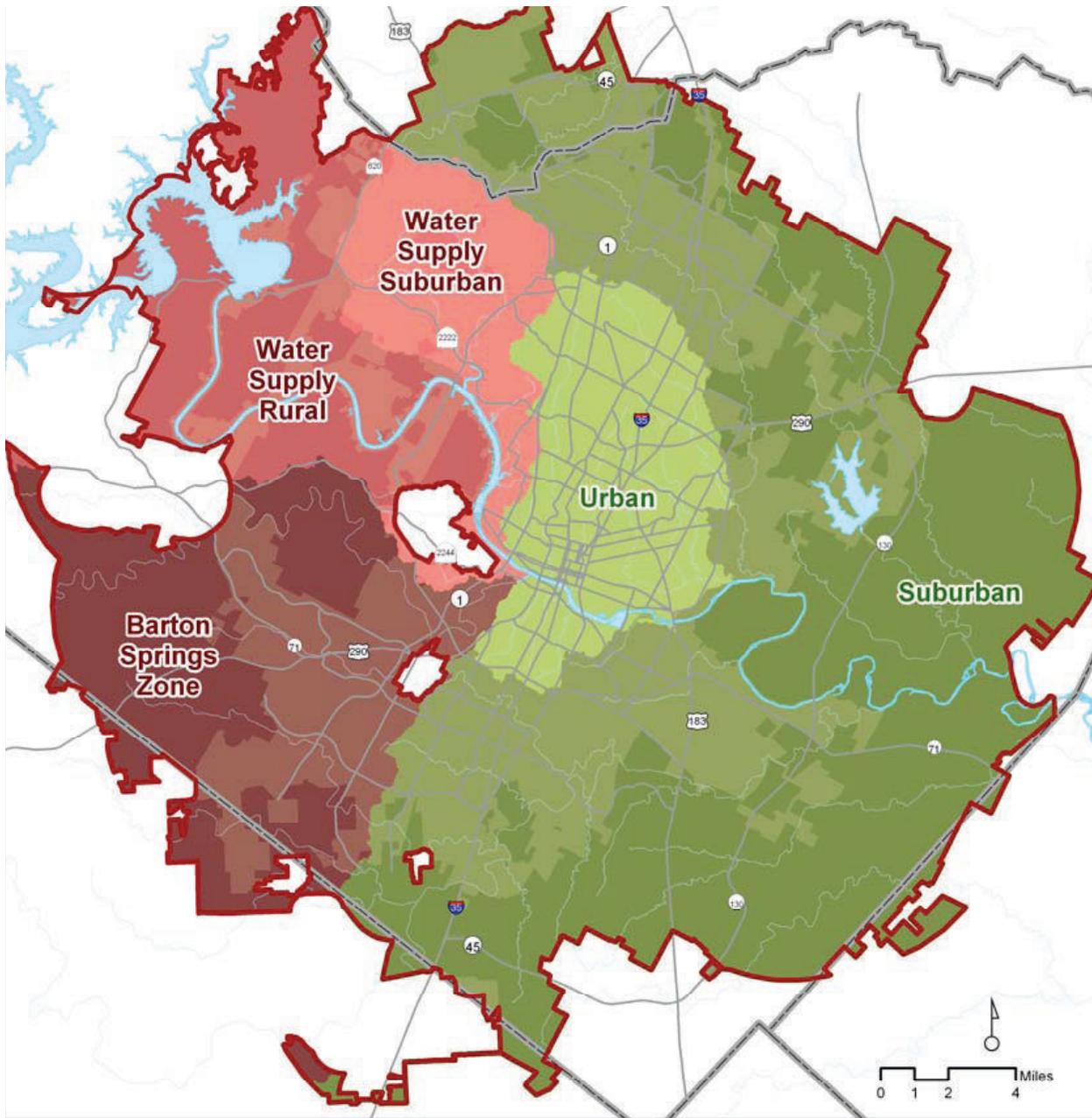
**Environmental Issue #1:** *As one of the fastest growing regions in the U.S., a major challenge facing Central Texas is the protection of the region's watersheds, waterways, and water supply.*

- ▶ In an effort to protect sensitive watersheds, impervious coverage limits range from 15-25% in the Barton Springs Zone and Water Supply Rural watersheds. Through regulation and policy, Austin is working to protect and enhance the region's water supply. Since 1997, development has been limited in the designated Drinking Water Protection Zone (DWPZ) watersheds and encouraged in the Desired Development Zone (generally the City of Austin and the south and eastern areas of the ETJ) (see *Figure 12*).
- ▶ Impervious cover limits are imposed by both watershed classification and zoning classification. However, stricter regulations are not in place on grandfathered tracts, or on tracts where certain development agreements exist. Development in restricted watersheds has still occurred at lower densities with more open space. Undeveloped land in the DWPZ continues to face development pressure (see *Land Use Issue #1*).



## ENVIRONMENTAL RESOURCES INDICATORS AND TRENDS

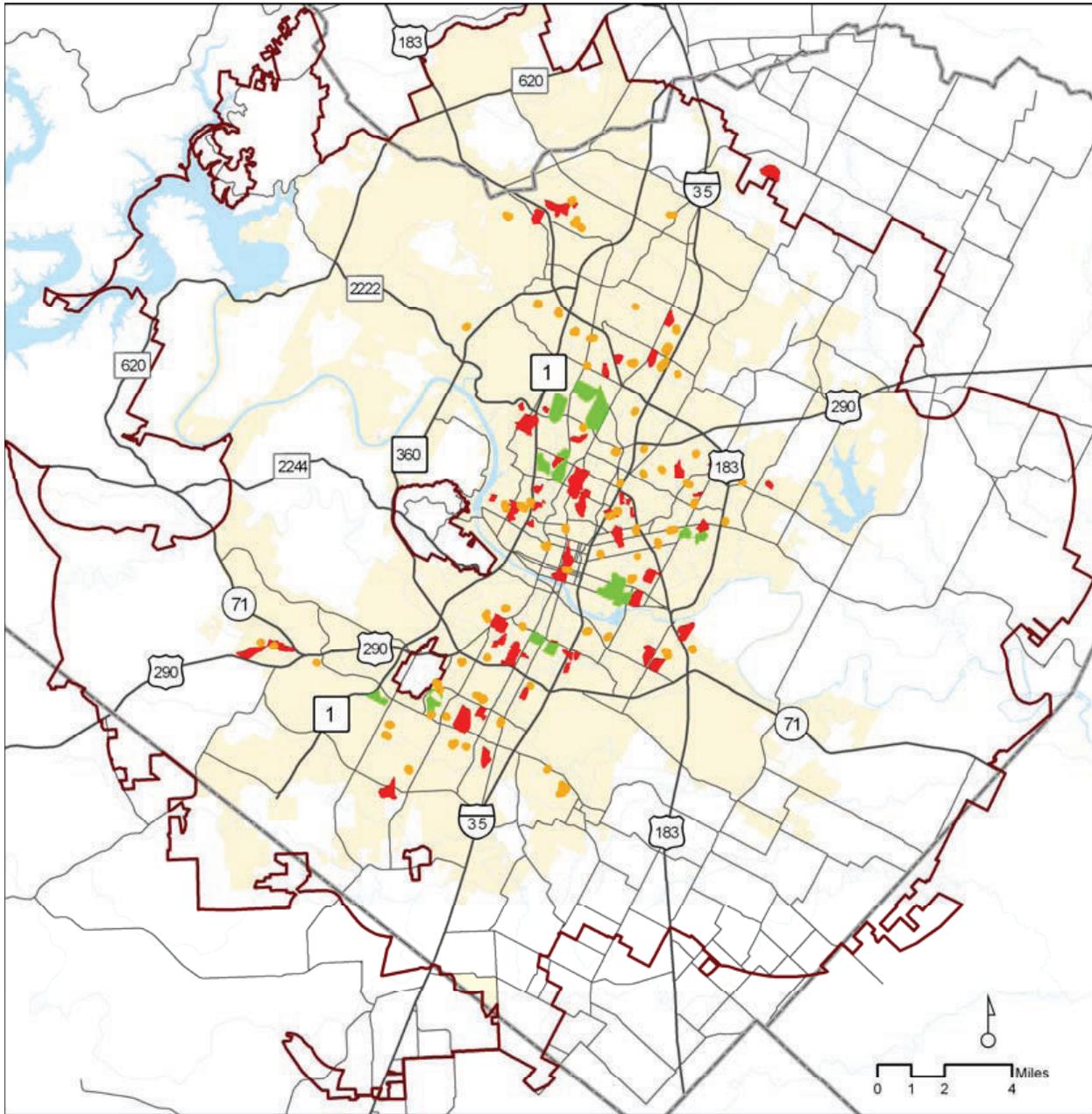
- ▶ Austin is located along the Colorado River, where it crosses the Balcones Escarpment, an area notable for its diversity in terrain, soils, habitats, plants, and animals.
- ▶ The most significant physiographic transition in Central Texas is marked by the change from Hill Country and Edwards Plateau on the west to the prairies on the east.
- ▶ Austin and the region are known for the water resources of the Colorado River and Highland Lakes system (e.g., Lake Travis, Bull Creek, Barton Creek, Lake Austin, Lady Bird Lake, Walnut Creek, and McKinney Falls).
- ▶ Barton Springs, the fourth largest spring in Texas, discharges an average of 27 million gallons of water a day from the Barton Springs Segment of the Edwards Aquifer. The springs feed Barton Springs Pool, one of the most popular and visited attractions in Central Texas.
- ▶ Despite abundant water resources, Austin's Watershed Protection Master Plan (2001) estimated over \$1.2 billion in capital funds needed to address flooding, erosion, habitat degradation, and damaged creek biology.
- ▶ The City measures the environmental integrity (EI) of watersheds on a two-year cycle. While 2006 scores were higher than 1996 scores overall, they were generally lower than both 2000 and 2003 scores, a decline which may be attributable to prolonged drought conditions and/or urban development.



### Smart Growth Initiative

- |                                                                                                                    |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  Desired Development Zone       |  City Limits |
|  Drinking Water Protection Zone |  ETJ         |
|                                                                                                                    |  County Line |

Figure 12. City of Austin Desired Development Zones, Source: Austin Community Inventory, GIS.



**Localized Flood**

-  Current Capital Improvement Projects
-  Future Capital Improvement Projects
-  Additional Localized Flood Problem Areas
-  City Limits
-  ETJ
-  County Line

Figure 13. City of Austin Localized Flooding, Source: Austin Community Inventory, GIS.

## Environmental Issue #2: Regional planning and coordination is needed to provide adequate water-related infrastructure and protect environmentally sensitive areas and floodplains.

- ▶ Regional population growth and development (including demand for water and wastewater treatment and groundwater pumping) threaten public water supply. Austin participates in regional water quality planning, public education, and is acquiring open space.<sup>8</sup> In addition, interdepartmental cooperation is increasing in an effort to promote increased use of recycled water for xeriscapes and other landscapes (see *Land Use Issue #1*).
- ▶ The Watershed Protection Department (WPD) is continuing its efforts to restore headwater streams, riparian areas, and erosion hazard zones. Tools such as conservation subdivision, transfer of development rights (i.e., designated sending and receiving areas, protection of sensitive areas and prime farmland), and enhanced floodplain management regulations are being considered.



## Environmental Issue #3: Watershed problems are widespread and will worsen if corrective action is not taken. Urbanization and drought are causing a decline in watershed health due to changes in hydrology (e.g., loss of baseflow, eroding stream-banks, and increased flooding).

- ▶ Austin closely monitors watershed issues and demand for projects addressing stream erosion far exceeds the City's resources. In addition, creek flooding poses a recurring citywide risk to public safety and property (see *Figure 13*).
- ▶ Localized flooding threatens property across the City due to undersized, deteriorated, or clogged drain systems. The Austin Water Utility (AWU) has a program to replace aging infrastructure and continuously upgrades infrastructure through its capital improvement plan. The City will need additional resources to improve and maintain aging infrastructure in areas where infill and redevelopment occur (e.g., in the urban core and along transit corridors).
- ▶ WPD is continuing to investigate methods to maximize on-site stormwater retention and is considering incentives or requirements to retrofit flood controls in areas that were developed without adequate drainage infrastructure.<sup>9</sup> Other actions include: exploring ways to increase the use of green infrastructure in public and private development; supporting conversion of enclosed streams to naturalized streams; educating the public about flash flood dangers and water quality; and considering erosion studies of the downstream system to better understand and prevent negative impacts.



<sup>8</sup> Water Quality Protection Lands and the Balcones Canyonlands Preserve.

<sup>9</sup> Existing financing methods for watershed improvement projects include: the Drainage Utility Fee, General Obligation Bonds, Regional Stormwater Management Fee, and the Urban Watershed Ordinance Fee.

## Environmental Issue #4: Potential impacts of climate change in Central Texas include increased drought, more severe weather events, elevated temperatures, and air pollution.

- ▶ The likelihood of increased drought and storms increases the vulnerability of the region's arid climate and reliance on rainwater to recharge the aquifer. Higher temperatures may result in an increase in energy use to cool homes and businesses, which also results in more air pollution. Increased costs (e.g., as region seeks to address air quality) and health risks are associated with the potential impacts.
- ▶ Austin's Climate Protection Plan (2007) seeks to make the City of Austin a national leader in local action to address climate change.<sup>10</sup> The Climate Action Team has completed a greenhouse gas inventory and update, reduced output by the equivalent of the electricity used by 26,100 homes per year, and continues to focus on collaboration, education, mitigation, and innovation. Regional cooperation is needed to implement climate change solutions.

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## Environmental Issue #5: While Central Texas complies with all federal air quality standards, the region is in danger of exceeding the ground-level ozone standard.

- ▶ Based on stricter EPA standards, depending on 2009 ozone levels, the region may not meet air quality standards for ozone levels. Not meeting federal air quality standards impacts the health of area residents, the cost of healthcare, and may damage Austin's reputation as a "green city."
- ▶ The region has a record of taking proactive voluntary measures to reduce ozone-forming emissions and Austin's air quality efforts have focused almost entirely on the reduction of ozone levels. Still, a non-attainment designation triggers federal requirements for transportation and industry that can increase costs for businesses and delay federal transportation projects. Many of these requirements apply for twenty years after the area regains compliance. EPA will announce its decision by spring of 2010.

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<sup>10</sup> The Climate Protection Plan sets broad goals (e.g., make all City facilities, vehicles, and operation carbon neutral by 2020; meet all energy needs with renewable resources by 2020).

**Environmental Issue #6:** *Despite Austin’s landscape requirements and tree protection ordinances, Austin’s tree canopy continues to decline as urbanization occurs.*

- ▶ Tree canopy is notably absent in commercial, multi-family, and industrial areas. Canopy losses from conversion of eastern prairie lands to farmland are also apparent, with bottomland areas along creeks and the Colorado River remaining patchily forested with large sections of exposed riparian zones along creeks.
- ▶ Austin’s City Arborist has been working with a Task Force to address concerns regarding protection of the trees and the natural environment. City staff is currently working to define the existing tree canopy baseline and establish quantifiable benefits that can be achieved from improved protection of the tree canopy.

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**Environmental Issue #7:** *As development continues to occur in or near environmentally sensitive areas of the region, ongoing preservation and conservation efforts will be required.*

- ▶ In 2002, voters passed a bond issue for open space acquisition and subsequent grants enabled the purchase of additional land and conservation easements. The same year, the Wildland Conservation Division (of AWU) was created by City Council.
- ▶ The Wildlands Conservation oversees land that provide key benefits to the Colorado River and its aquifers, in addition to re-establishing and protecting natural and plant species and habitats of the larger ecosystem.
- ▶ Land within the Balcones Canyonlands Preserve (BCP) conserves habitat for eight endangered species and is owned through a partnership system. Major owners/partners include: the City of Austin, Travis County, The Nature Conservancy of Texas, the Lower Colorado River Authority, the Travis Audubon Society, and other private BCP partners.

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# TRANSPORTATION

**Transportation Issue #1:** *While transit use is increasing, automobiles remain the dominant travel mode in Austin and the larger region.*

- ▶ Transportation choices and trends are closely related to land use patterns. Much of the region's growth has occurred in low-density development at the edge of the existing urban areas. As a result, the Austin MSA has a relatively high percentage of people driving alone to work compared with other metro cities (e.g., San Francisco, Seattle, Portland, Chicago, and Los Angeles).
- ▶ More roads are required to support lower density development patterns. During 1980-2000, the total vehicles miles traveled increased in all of the five counties surrounding Austin. The annual vehicle miles traveled (VMT) continued to increase (36% between 1980-2005), but at a slower rate after 2000. The average daily miles traveled per person actually decreased in the MSA after 2000.
- ▶ Although factors such as fuel price, transit usage, and population density have shown to reduce total VMT, and in turn improve air quality, addressing the land use/transportation connection has been shown to play a significant role in reducing vehicle trips and VMT in other metropolitan areas.
- ▶ While the percentage of workers driving to work increased since 2000, the percentage of workers taking transit to work in Austin is estimated to have also increased to 4.9%, which is higher than the MSA or State average.

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## TRANSPORTATION INDICATORS AND TRENDS

- ▶ **Over 76% of all workers in the MSA travel to work alone by car, compared with 71% of all workers in Austin. Compared with other major cities (e.g., Los Angeles, Chicago, Seattle), Austin has a high relatively low percentage of people commuting to work by transit.**
- ▶ **Both the percentage of workers driving to work and taking transit to work is estimated to have increased since 2000, while the percentage carpooling decreased.**
- ▶ **In 2005, the average trip in the region was 7.8 miles long and took 12.9 minutes. However, nearly 25% of trips are fewer than two miles or take under five minutes.**
- ▶ **Capital Metro's All Systems Go Long Range Transit Plan weaves together a number of existing and proposed transportation modes. At full realization, the transit system will include: MetroRail (red line with diesel-electric engine trains) and potential connector lines, the Regional Commuter Line (Austin-San Antonio), Capital Metro Rapid (high-tech bus service), Express and Local Bus service, and Circulator Streetcars (connected to MetroRail).**
- ▶ **Capital Metro Rail (red line) is preparing for service to begin as soon as March 2010. The system will run on 32-miles of existing freight tracks between Leander and Downtown Austin, with service every 35 minutes.**

## Transportation Issue #2: In Austin, roadway congestion and related costs (e.g., increased commuter time) have been increasing since the 1980s.

- From 1982 to 2006, in 90% of areas surveyed in Texas demand for roadway capacity grew faster than supply.
- Adding capacity to roadways is not a stand-alone solution to transportation congestion. Impacts of added capacity include increased construction and maintenance costs, the negative environmental impacts of new roads, and increased regional vehicle miles traveled.

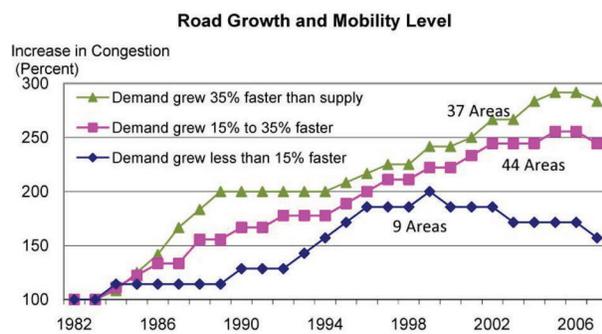


Figure 14. Road Growth and Mobility, Source: Texas Transportation Institute, Urban Mobility Report.

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## Transportation Issue #3: There are 11 separate agencies that have the authority to plan, construct, or operate various modes of transportation in Austin and the ETJ, which can make coordination between agencies difficult.

- Regional agencies include: Capital Areas Metropolitan Planning Organization (CAMPO); Texas Department of Transportation (TxDOT); Capital Metro Transportation Authority; Central Texas Regional Mobility Authority (CTRMA); Austin San Antonio Intermunicipal Commuter Rail District (ASAICRD); Capital Area Rural Transit (CARTS); and the Capital Area Council of Governments (CAPCOG). The following municipalities are also responsible for planning, construction, and implementation in their jurisdictions: City of Austin; Travis County; Williamson County; and Hays County.
- All of these agencies, with the exception of CAMPO and CAPCOG, have the responsibility for implementing and operating as well as planning their mode or system.

**Transportation Issue #4:** The recently adopted Austin Bicycle Plan identified barriers along existing bicycle routes as a key issue impacting bicycle commuting and use.

- ▶ In 2007, the League of American Bicyclists designated Austin a Silver-level Bicycle Friendly Community reflecting the community's commitment to providing safe, efficient, and accessible bicycle facilities to residents.
- ▶ Austin's 2009 Bicycle Plan established a number of objectives to meet the goal of significantly increasing bicycle use and safety across Austin over the next ten years. The Plan seeks to reduce the number of barriers along existing routes (e.g., crossing of major highways such as MoPac, IH-35, US 183, and US 290; crossing of the Colorado River at Pleasant Valley Road) as a priority in completing the city's bicycle network.

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**Transportation Issue #5:** According to the recently adopted Sidewalk Master Plan, Austin has 3,500 linear miles of absent sidewalk and 5,500 curb ramps.

- ▶ The 2009 Sidewalk Master Plan estimates the total cost for building out the sidewalk network (i.e., filling in gaps) at \$750 million. The Plan identifies priorities for improving the network across the City and in different neighborhoods.
- ▶ Priority areas for sidewalk improvements are distributed the City. However, the highest concentrations were identified in the Central East Austin, East Cesar Chavez, Holly, and South River City neighborhoods.

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# PUBLIC UTILITIES

**Public Utilities Issue #1:** Much of Austin’s stormwater system in the Urban Watersheds (the most densely populated areas) is undersized and in poor condition.

- ▶ The City’s stormwater system is in need of upgrades and infrastructure improvements. The identified stormwater capacity improvement areas are likely to increase as infill and development occurs (see *Environment Issue #3*).



**Public Utilities Issue #2:** While Austin has initiated measures to reduce water use and demand for treated water, Austin Water Utility (AWU) projects that the demand for treated water will exceed the current treatment capacity within approximately six years.

- ▶ Since 1983, Austin’s Water Conservation Program has focused on reducing water use by reducing peak day demands through incentives, education, water use evaluations, and audits.<sup>11</sup> The city’s top water conservation successes, in order of ten-year estimated savings are: 1) watering restrictions (6.16 MGD), 2) reclaimed water use (5.95 MGD), 3) utility water rates (5.0 MGD), 4) reducing water loss (4.8 MGD), and 5) mandatory toilet retrofit program (2.1 MGD).
- ▶ AWU’s Water Reclamation Initiative has provided reclaimed water for irrigation since the 1970’s. Reclaimed water from two plants provides non-potable water for irrigation, commercial, industrial, and institutional uses. Plans to expand this system are in place.
- ▶ The nationally recognized Beneficial Biosolids Reuse Program is designed to treat wastewater byproduct by composting it into an EPA-approved fertilizer (i.e. Dillo Dirt), which is then reused at the City’s parks and sold to the public through garden retailers.

**PUBLIC UTILITIES INDICATORS AND TRENDS**

- ▶ **Austin Water Utility (AWU) has a total service population of approximately 854,000. Water is drawn from the Colorado River (on Lake Austin) into two treatment plants (Davis and Ullrich) located in Central Austin.**
- ▶ **The Water Protection Department (WPD) has identified more than 420 areas needing stormwater capacity updates in the urban core.**
- ▶ **Austin currently has the combined wastewater treatment plant capacity to treat 285 million gallons per day (MGD).**
- ▶ **In 2007, the Solid Waste Services diversion rate was 29% and recycling participation was around 71% citywide.**

Peak Day Water Savings Amounts (Listed in order)	Ten Year Estimated Peak Day Savings	WCTF FY 2008 Projected	FY 08 Actual
Watering Restrictions	6.16	0.0	5.0 to 9.0
Reclaimed Water Use	5.95	0.0	0.0
Utility Water Rates	5.00	0.0	0.0
Reducing Water Loss	4.80	0.0	1.31
Mandatory Toilet Retrofit	2.10	0.29	0.0
Annual Irrigation System Audits	1.47	0.45	0.0
Residential Irrigation Standards	1.32	0.13	0.07
Commercial Irrigation Standards	0.74	0.07	0.0
Enhanced Irrigation Audit Program	0.63	0.21	0.04
Pressure Reduction Program	0.29	0.03	0.001
Car Washes	0.15	0.00	0.00
<b>Total (MGD)</b>	<b>32.65</b>	<b>1.18</b>	<b>6.4 to 10.4</b>

**Figure 15. Water Conservation Successes, Source: Austin Water Utility, City Council Briefing 2009.**



<sup>11</sup> City Council passed the Water Management Ordinance (2007), which resulted in a higher than expected reduction in peak outdoor water use the following year. Over the next ten years, the Ordinance establishes a goal of saving an average of 1% in water use per year to achieve a total savings of 25 MGD.

**Public Utilities Issue #3:** To meet energy efficiency goals set by Austin Electric and the Climate Protection Plan, the City needs to reduce peak energy demand by 700 MW by 2020.

- From 1982 through 2003, Austin Electric (AE), the largest City of Austin department, reduced peak electric demands by 600 MW through conservation, efficiency, and load-shifting programs. AE’s goal is double their efforts and reduce peak demand further by 2020.
- Peak demands occur in the summer and during winter evenings. Reductions during these peak periods provide both AE and its customers with costs savings and reductions in power plant emissions.



**Public Utilities Issue #4:** At present rates of demand growth, the trend in water usage suggests Austin customers will exceed long-range water supply as currently contracted with the Lower Colorado River Authority (LCRA) by the year 2050.

- To meet future demand for water, based on present rates of growth, Austin would need 376,000 acre-ft of water in year 2050, or about 51,000 acre-ft per year more than the current contract amount with LCRA. Conservation and water reclamation programs will be required to make up the shortfall (source: AWU, Raymond Chan Engineers).



**Public Utilities Issue #5:** To implement the goals set by the City’s Zero Waste Plan (i.e., reduce the amount of waste sent to landfills by 90% in the year 2040), Austin will need to increase recycling rates, increase the type of materials recycled, increase capacity, and increase residential and commercial composting.

- Austin operates a “pay as you throw program” that provides a volume-based system for garbage collection tied to fees charged to customers.
- The City has a relatively high (71%) participation in recycling rate and has set aggressive targets to further reduce waste and increase the landfill diversion rate. Significant increases in recycling rates for multi-family, commercial, institutional, industrial, and manufacturing uses are needed to meet the target. In addition, the types of materials (e.g., electronics, furniture) residential and commercial customers recycle must be increased. If recycling rates increase, the City currently does not have adequate containers and space to store and manage the increased volume of material and will need to develop local Material Recovery Facilities with capacity to handle large volumes of unique materials. Finally, increased public participation in composting and home and work is needed to meet the diversion target.

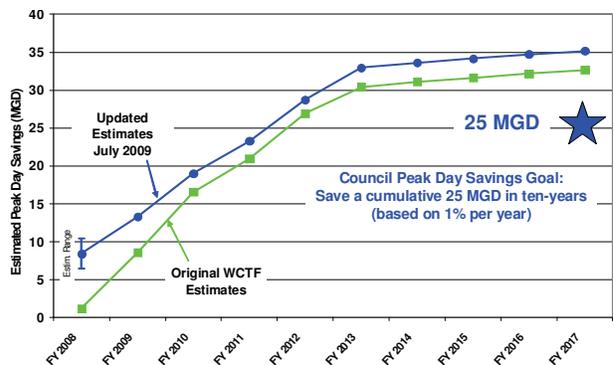


Figure 16. Projected peak day water usage savings (MGD)



# COMMUNITY SERVICES

## Community Services Issue #1:

Continued outward growth and annexation and/or increased density and infill affects the ability of public safety providers (i.e., Austin Fire Department, Austin Police Department) to maintain levels of service.

- ▶ Texas state statutes require the immediate provision of fire protection and emergency service response to newly annexed areas of a municipality. Annexations may divert funding for improvements and maintenance from existing service areas or limit the City's ability to move forward with proposed annexations. Both police and fire departments require additional staff, facilities, and equipment to maintain level of service standards in developing areas.
- ▶ Austin's Fire Department building infrastructure is aging and may require renovation, reconstruction, or consolidation to accommodate modern equipment and increased personnel. For example, 12 fire stations cannot accommodate the larger fire truck apparatus required to improve level of service standards and response capabilities and nearly half of AFD stations are more than 40 years old.



### COMMUNITY SERVICES INDICATORS AND TRENDS

- ▶ Austin Fire Department is rated Class 2 by the Insurance Services Office (ISO), the second highest level on a scale of 1-10. Ratings are based on factors such as water supply and distribution, fire department apparatus and equipment, distribution of fire companies, staffing and training of fire personnel, fire alarm processing, and fire prevention efforts.
- ▶ According to the Central Texas Sustainability Project, after a long decline, most municipalities in the five-County region saw an increase in crime in 2007.
- ▶ The Austin Police Department has established targets for 2010 aimed at reducing crime and traffic fatalities, as well as increasing the percentage of residents who feel safe in their neighborhoods during the day and night (e.g., from 70% to 75% based on surveys).
- ▶ The Austin-Travis County Emergency Medical Services (A/TCEMS) serves the entire county and is jointly funded by the City of Austin and Travis County.
- ▶ There are 12 Independent School Districts and a growing number of private and charter schools operating in the Austin ETJ.
- ▶ Austin Independent School District (AISD), the largest school district in Austin, has 8 nationally recognized blue ribbon schools.

## Community Services Issue #2:

**Regionalization, cooperation, and sharing of resources among public safety and other providers can maximize efficiencies in the use of available resources.**

- ▶ Regionalization of fire protection and emergency service response can occur through mutual and/or automatic aid agreements. A benefit of regionalization is increased communications and development of policies to improve the sharing of limited resources and reduce potential duplication of services. In addition, trends point to an increase in the type of crimes occurring across municipal and state borders, further supporting the need for improved coordination between municipal, county, and state police and emergency service providers.
- ▶ The Austin Fire Department has indicated that state disaster response plans are beginning to place more emphasis on statewide cooperation in the event of a large-scale disaster (e.g., wildfires, floods) to reduce the burden on local and regional fire and emergency response departments.

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## Community Services Issue #3:

**The two school districts serving the largest area in the Austin ETJ (Austin ISD and Del Valle ISD) are facing challenges related to population growth, immigration/language needs, poverty, and transient families.**

- ▶ Austin ISD is the largest school district in the ETJ with an enrollment of 82,074 students on 110 campuses. AISD has a diverse student body (e.g., 57 different languages) and about 20% of students enter the district as non-English speakers.
- ▶ Del Valle ISD is experiencing significant growth in its student body resulting in overcrowded schools. Nearly 80% of students are considered economically

disadvantaged. The District covers southeastern area of the Austin ETJ, generally east of I-35 and includes developing areas near the airport. The District is adding a middle school and elementary school, however securing funding for continued growth will be a challenge.

- ▶ Overall student test scores at both school districts are close to, but slightly below state averages. Generally, test scores at AISD have increased over the last four years. Both AISD and Del Valle ISD are rated “academically acceptable” by the State Education Agency (source: *GreatSchools.net*)

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## Community Services Issue #4:

**Stakeholder interviews suggest that blue ribbon and other high-ranking schools are attracting upper-income families, while lower-income families are moving to other areas of the region to seek out high performing schools in more affordable neighborhoods (e.g., Red Rock) or remain in under-performing schools.**

- ▶ Students have the option to attend their neighborhood school, another school in the district, or a magnet school (specific admission requirements). Students enrolled in low-performing schools (as rated by the Texas Education Agency) may also transfer to another school district.
- ▶ Still, the 2009 Central Texas Indicators project found inequalities in graduation, drop-out, and test statistics based on race and income in Central Texas school districts. Graduation rates are disproportionately low among Hispanic and African-American students in the region. Further, Hispanic and African-American students remain less likely than white students to attend an “Exemplary School” as defined by the State Education Agency.

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# PARKS AND RECREATION

## Parks and Recreation Issue #1:

Population growth and changing demographics is creating a growing need for open space in the urban core, neighborhood and regional parks in developing areas, and trails and greenway projects across the region.

- ▶ The 2010 Long Range Plan found that there is a need for more park space within walking distance (1/2-1 mile) of urban core neighborhoods. In addition, the plan identifies priority park trail projects and greenway acquisition.
- ▶ Based on the recommendation of the Long Range Plan, Parks and Recreation Department (PARC) has shifted parkland acquisition to include “infill” or pocket parks within already developed areas of the city. This shift may result in lowering Austin’s ratio of 24 acres of parkland/1,000 people (due to acquisition of smaller, more expensive land areas), but will further the goal of making parkland available within one-mile of all residential neighborhoods.
- ▶ In addition to meeting urban needs, land acquisition planning is ongoing in developing areas where the gap analysis revealed the greatest need, areas with significant environmental features, new Transit Oriented Developments, and the North Burnett/ Gateway Neighborhood Planning Area.
- ▶ Trail-related activities (e.g., walking, running, biking) continue to be the most popular recreational activities in Austin. PARC has identified priority trails and greenway projects (e.g., trail connections from Blunn and West Bouldin Creek to Lady Bird Lake and the Red Line railroad ROW Trail) and continues to acquire land to close the gaps within existing greenways.
- ▶ The 2010 Long Range Plan also identified a need for: development of off-leash dog parks, skate parks, neighborhood tennis courts; protection of environmentally sensitive areas; increased connectivity from neighborhoods to parks, greenways, and trails; and installation of park benches, tables, and trash receptacles.

### PARKS AND RECREATION INDICATORS AND TRENDS

- ▶ Austin has over 200 parks and preserves totaling more than 17,000 acres, including district parks, neighborhood parks, and activity centers. The park system includes facilities such as museums, an art center, a botanical garden, and cultural centers.
- ▶ According to the Parks and Recreation Long-Range Plan for Land, Facilities, and Programs Austin has 24 acres of parkland/1,000 persons, which on an overall basis exceeds national guidelines.
- ▶ The standard service area for a neighborhood park in Austin has been defined as 1 mile; however, ½ mile is considered desirable for walking areas. There is a need for more parkland within walking distance in urban core neighborhoods and developing areas in southwest, north, northeast, and northwest Austin.
- ▶ Austin is accredited by the Commission for Accreditation of Parks and Recreation Agencies (CAPRA), a national benchmark for parks and recreation departments.

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## Parks and Recreation Issue #2:

There is a growing need to repair, restore, and replace older park facilities.

- The improvement and repair of park facilities in and around Downtown Austin is an emerging need, in part resulting from an increase in population in Central Austin. Priority projects include the improvement of parkland along Lady Bird Lake, preservation of historic squares, conversion of Holly Street Power Plant to a park, and improvement of Zilker Park/Barton Springs Pool. Another goal is to install more park benches, checkerboard tables, and trash receptacles in existing parks.



## Parks and Recreation Issue #3:

Austin's park system has doubled in size over the last 20 years, but funding for the maintenance and operation of new parks and facilities has not kept pace with growth.

- PARC's long range plan indicates that the department will need to increase its reliance on partners and volunteers to more efficiently provide recreational services. Planning for new parks needs to be closely coordinated with other providers given fiscal constraints. The rising cost of fuel also impacts the operations of PARC and park users. As more people stay close to their homes, local recreational resources are becoming increasingly important to residents.



# HEALTH AND HUMAN SERVICES

**Health Issue #1:** *There are a growing number of children and families without health insurance in Travis County.*<sup>12</sup>

- ▶ While the percentage of Travis County residents with health insurance (85%) is greater than the national average, there is great discrepancy based income across the region.
- ▶ According to a survey for the Central Texas Sustainability Indicators Project, the number of Travis County respondents without health insurance decreased from 2004 to 2008 (18% to 15%), which may indicate a positive trend in percentage of insured.
- ▶ The Indicators Project also found the demand in Central Texas for public mental health providers has increased since 2006, without similar increases in capacity/programs. The number of adult residents served by public mental health providers increased after 2006, spiking in the first half of 2009. These increases could be attributed to the stresses associated with the current economic recession.

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## HEALTH AND HUMAN SERVICES INDICATORS AND TRENDS

- ▶ **The Austin region has two major health care systems: St. David's and Seton Healthcare networks.**
- ▶ **In Central Texas in 2008, over 35% of households earning less than \$35,000 a year did not have health insurance.**
- ▶ **In 2008, approximately 18% of children and youth under age 18 in Travis County were uninsured and nearly 20% were living in poverty.**
- ▶ **The Central Texas Sustainability Indicators Project is increasing its monitoring of trends such as childhood obesity. For example, distribution of Body Mass Index (BMI) scores for middle schools in Austin indicate nearly all clusters of obesity are located in economically disadvantaged neighborhoods in North, East, and South Austin.**
- ▶ **The number of immigrants in Travis County is growing; between 1990 and 2005, the foreign-born population grew by 230% (about 45,000 to 148,000) (Source: Immigrant Services Network of Austin).**

<sup>12</sup> Sources: Community Action Network, American Community Survey (Census), Central Texas Sustainable Indicators Project.

## Health Issue #2: Texas has the fastest growing population under 18 in the nation and in 2008, nearly one in five children in Travis County was living poverty.

- ▶ Nationally, one-third of children raised in poverty remain in poverty as adults. The region’s rapidly growing population of young children (under 5 years old) is especially vulnerable to poverty and its effects.
- ▶ Food insecurity is more likely in children in low-income households.
- ▶ As housing becomes more expensive in Austin, some middle/low-income families are seeking housing outside of the City and farther from jobs. Proximity to transportation, employment, healthcare, and childcare can greatly benefit families dealing with poverty (see *Housing Issue #1*).
- ▶ Austin has a very active social service network. In 1995, city and county school districts came together to address the large amount of funds being spent on social services. The Community Action Network (CAN), a board of 18 partner organizations, now meets on a regular basis to strengthen partnerships develop collaborative strategies to health and other social issues. CAN is developing a set of priority indicators for children and youth to measure progress.
- ▶ As mentioned above, the Central Texas Sustainability Indicators Project tracks measures of health/human services as part of the overall sustainability measure. Still, stakeholder interviews indicate there is more collaboration on solutions to health and human services issues at the regional level.



## Health Issue #3: Stakeholder interviews indicate that there is a need for more urgent (non-emergency) care facilities and better access to primary care facilities in Austin.

- ▶ As of 2009, all Central Texas counties were classified as “medically underserved” by the U.S. Department of Health and Human Services. This designates a shortage of personal health services in the five-county region.
- ▶ While the two healthcare systems have sufficient emergency care, there is a lack of urgent care facilities in Travis County.<sup>13</sup>
- ▶ The Community Action Network (CAN) is considering strategies to better connect public transportation services and health and human service providers. This effort would help to better inform case workers and others involved in social services of existing networks (e.g., churches with van pool) and identify areas that are in need of transportation and access improvements.



<sup>13</sup> Urgent care refers to ambulatory or walk-in care outside of a traditional emergency room. Urgent care centers across the country are primarily used to treat patients with an illness or injury (e.g., ear infection) that requires immediate care, but is not serious enough to warrant an emergency room visit. These centers often provide significant savings compared with hospital emergency care options.

## How Are We Doing? Trends

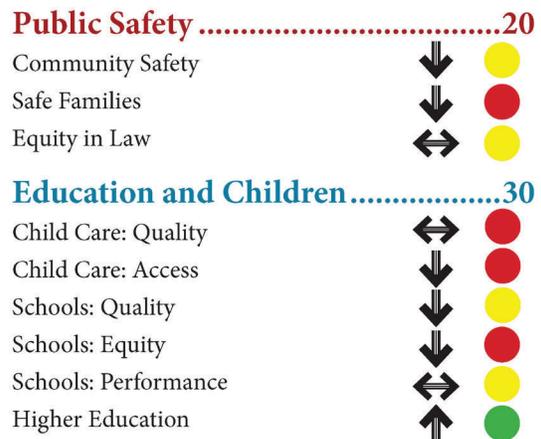


Figure 17. Central Texas Sustainability Indicators Project (Excerpt from 2009 Report).

## Health Issue #4: **There is a need to address barriers (e.g., cultural, language, safety concerns, etc.) that hamper participation of immigrants in the larger Austin community.**

- ▶ Austin's immigrant population is growing. As of 2008, the majority was Spanish speaking (80%). The other 20% included an increasing number of refugees from countries such as Bhutan, Burma, Iraq, and Turkey as a result of Austin's status as a preferred settlement community. Nationally, the Austin-San Marcos region is classified as an "pre-emerging immigrant gateway" - or an area with a previously small foreign-born population that is now experiencing rapid growth (Brookings Institute, 2004).
- ▶ Austin's Asian community is growing rapidly. Some households in this community, (e.g., Vietnamese families) have few or no English speakers and therefore face language barriers (*see Housing Issue #2*).
- ▶ In addition to language barriers, immigrant families can experience economic hardships, separation between parents and children, isolation, and emotional stress. These issues often place a strain on school resources, faith-based organizations, and other community organizations. Recent immigrants, across educational levels, may also experience difficulties finding employment (source: Immigrant Services Network).

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# SUSCEPTIBILITY TO CHANGE

Susceptibility to Change is used to broadly indicate the likelihood that an area will change in the foreseeable future. Change can include new development on previously undeveloped land, redevelopment, change of use, or intensification of use. Characterizing the probability of such change (typically in three categories – high, medium, and low) is useful for a comprehensive planning process in order to help understand the dynamics of growth and change in the community. This analysis will inform development of Comprehensive Plan strategies and actions (i.e., to influence change in highly susceptible areas in the direction of the Vision).

Susceptibility to Change in the study area (the City of Austin and its ETJ) was determined by spatially overlaying eleven factors (indicators of change) from the City's GIS database:

- owner occupancy
- land status
- improvement to land ratio
- zoning and overlay districts
- projected growth in employment
- water service
- transit corridors
- road access
- property violations
- year built
- development cases

## Conclusions

In general terms, the Susceptibility to Change analysis reveals the following:

- Areas most susceptible to change are concentrated in a north-south “spine” within the study area, particularly from downtown Austin north to Williamson County. This confirms the conclusion of Land Use Issue #3 that the momentum of growth in the region appears to be in a northward direction.
- The predominant classification of areas in the eastern and southern portions of the study area is moderately susceptible to change.
- The predominant classification of areas in the western portion of the study area is least susceptible to change.

For the purposes of this analysis, the study area was divided into 10-acre grid cells. Every cell received a normalized value for each factor between 0 and 1, with 0 being the least susceptible to change and 1 being the most susceptible to change. All factors were then added together with equal weights to produce a final susceptibility score. The accompanying series of maps show the results for each factor and the synthesis of all factors. The synthesis map totals the susceptibility scores for each cell and divides the result using logical breaks into three categories: areas most susceptible to change, areas moderately susceptible to change, and areas least susceptible to change.

The draft synthesis map and description of each factor is provided below.

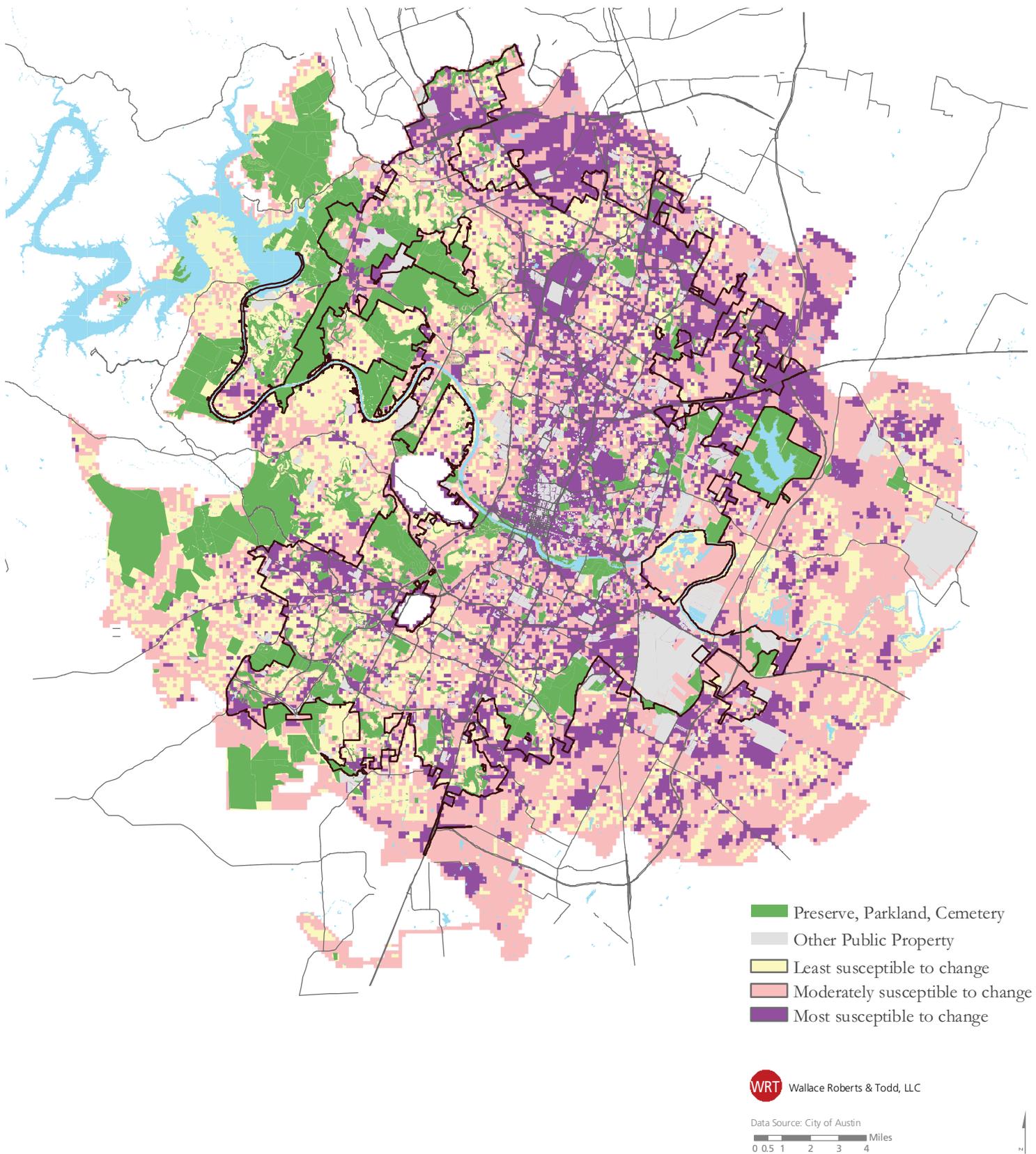


Figure 18. Draft Susceptibility to Change Analysis, February 2010

## Susceptibility to Change Factors

### Owner Occupancy

Most susceptible	1	not owner-occupied or not residential
Least susceptible	0	owner-occupied residence

Owner occupancy is based on the homestead exemption flag in Austin's land database.

### Land Status

Most susceptible	1	undeveloped, no constraints
	0.67	developed, no constraints
	0.33	undeveloped, constraints
Least susceptible	0	developed, constraints

### Improvement to Land Ratio

Most susceptible	1	ILR > 1.5	
Least susceptible	0	ILR = 0, or non-commercial property	
All possible values in-between			
Example		0.67	ILR = 1

Improvement to Land Ratio (ILR) is the appraised value of an improvement divided by the value of its land. The theory is that land owners will seek to maximize their investment in the land by developing or redeveloping when the value of the improvement is less than the land.

### Zoning and Overlay Districts

Most susceptible	1	areas in vertical mixed use, mixed use, planned unit development, transit-oriented development, or North Burnet/Gateway districts;
		areas in North Burnet/Gateway, transit-oriented development, university, urban renewal, or central urban redevelopment overlay districts; and
		areas with high-density mixed use, major planned development, mixed use, mixed use/office, neighborhood mixed use, or transit-oriented development future land use designations
	0.5	not in any of the above or below districts
Least susceptible	0	areas in historic or neighborhood conservation combining districts

### Projected Growth in Employment

Most susceptible	1	greatest growth in employment density (jobs / acre)
Least susceptible	0	least growth in employment density (jobs/acre)

All possible values in-between

**Water Service**

Most susceptible	1	areas currently served by water mains
	0.75	retail water area served 2009
	0.5	impact fee service area boundary
	0.25	outside impact fee service area, in desired development zone
Least susceptible	0	outside all areas above

**Transit Corridors**

Most susceptible	1	areas closest to most transit corridors (well served by transit)
Least susceptible	0	areas outside all transit corridors (not well served by transit)

All values in-between

*This layer is the result of a sub-overlay analysis that combined transit corridors. For each of the following transit corridors, a cell was given a value equal to its distance from the corridor. Distance values given up to a half mile away for CapMetro Red Line and rapid bus routes, Austin-San Antonio Commuter Rail corridor, and MoKan corridor. Distance values given up to a quarter mile away for Core Transit Corridors, express and local bus routes.*

**Road Access**

Most susceptible	1	areas with greatest density of arterial roadways (best road access)
Least susceptible	0	areas with least density of arterial roadways (worst road access)

All values in-between

*The road network included in this analysis combines existing roadways with those proposed in the 2025 Austin Metropolitan Area Transportation Plan.*

**Property Violations**

Most susceptible	1	most property violations
Least susceptible	0	no property violations

All values in-between

**Year Built**

Most susceptible	1	built in or before 1900 or undeveloped
Least susceptible	0	built in 2000 or later
All values in-between		
Example	0.19	built in 1981

**Development Cases**

Most susceptible	1	areas with development cases
Least susceptible	0	areas without development cases or developed